PATENT COOPERATION TREATY

To:

From	the	INTERN	IATION	ΔΙ	RUI	RFA	П
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NOTIFICATION OF ELECTION

(PCT Rule 61.2)

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24

Arlington, VA 22202 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 31 May 2001 (31.05.01)	ETATS-UNIS D'AMERIQUE in its capacity as elected Office
International application No. PCT/US00/18041	Applicant's or agent's file reference FP64074-3/SM
International filing date (day/month/year) 30 June 2000 (30.06.00)	Priority date (day/month/year) 01 July 1999 (01.07.99)
Applicant KLEY, Victor, B.	

1.	The designated Office is hereby notified of its election made:
	X in the demand filed with the International Preliminary Examining Authority on:
	10 January 2001 (10.01.01)
	in a notice effecting later election filed with the International Bureau on:
2.	The election X was
	was not
	made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Olivia TEFY

Facsimile No.: (41-22) 740.14.35 Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

7	From th	ne INTERNATIONAL BI	UREAU		
PCT PCT	To:				
NOTIFICATION OF THE RECORDING OF A CHANGE (PCT Rule 92bis.1 and Administrative Instructions, Section 422)	Towi Two 8th F San	SLONE, David, N. Townsend and Townsend and Crew LLP Two Embarcadero Center 8th Floor San Francisco, CA 94111-3834			
Date of mailing (day/month/year) 21 January 2002 (21.01.02)		rs-unis d'amerique			
Applicant's or agent's file reference FP64074-3/SM		IMPORTANT NOTI	FICATION		
International application No. PCT/US00/18041		nal filing date (day/month/yeune 2000 (30.06.00)	ear)		
The following indications appeared on record concerning: the applicant the inventor	the agen	the commo	on representative		
Name and Address RAVE, L.L.C. Suite 607		State of Nationality US	State of Residence US		
780 Montague Expressway San Jose, CA 95131 United States of America		Telephone No. Facsimile No.			
		Teleprinter No.			
2. The later visit I Day					
2. The International Bureau hereby notifies the applicant that X the person the name. the accordance to the accordance	the following o	the nationality	the residence		
Name and Address GENERAL NANOTECHNOLOGY, LLC 1119 Park Hill Road		State of Nationality US Telephone No.	State of Residence US		
Berkeley, CA 94708 United States of America					
		Facsimile No.			
		Teleprinter No.			
3. Further observations, if necessary:					
4. A copy of this notification has been sent to:					
X the receiving Office		the designated Offices of	concerned		
the International Searching Authority X the International Preliminary Examining Authority		the elected Offices conc	erned		
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized o	ifficer Ingrid AULICH	1		
Facsimile No.: (41-22) 740.14.35	Telephone N	lo.: (41-22) 338.83.38			

ATENT COOPERATION TREATY

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REC'D 20 APR 2001

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

	(PCT Article 36 ar	nd Rule 70)	10/019009
Applicant's or agent's file reference 15772-6-1PC	FOR FURTHER ACTION	See Notif	fication of Transmittal of International Examination Report (Form PCT/IPEA/416)
International application No.	International filing date (day/m		Priority date (day/month/year)
PCT/US00/18041	30 JUNE 2000		01 JULY 1999
International Patent Classification (IPC) IPC(7): H01J 37/26 and US Cl.: 25	or national classification and IPC 50/306, 307; 73/105		
Applicant GENERAL NANOTECHNOLOGY, I	L.L.C.		
Estamining Nationally and is	transmitted to the applicant ac	been prepar	red by this International Preliminary Article 36.
seen unended and are un	panied by ANNEXES i.e. shee	eis containin	cription, claims and/or drawings which have g rectifications made before this Authority. nder the PCT).
These annexes consist of a to	tal ofsheets.		
3. This report contains indication	as relating to the following iter	ns:	
I X Basis of the repor	rt		
II Priority			
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		elty, inventi	ve step or industrial applicability
IV Lack of unity of i			
V X Reasoned statement citations and explan	under Article 35(2) with regard actions supporting such statemer	d to novelty,	inventive step or industrial applicability;
VI Certain documents c	rited		
VII Certain defects in the	e international application		
VIII Certain observations	on the international application		
Date of submission of the demand	Date of	completion of	of this report
10 JANUARY 2001		APRIL 2001	
Name and mailing address of the IPEA/US Commissioner of Patents and Trademar		ed office	i la via
Box PCT Washington D.C. 20231	KIF	ET T. NGKY	End ling hitch

(703) 308-4855

Telephone No.

Facsimile No. (703) 305-3230

Form PCT/IPEA/409 (cover sheet) (July 1998)*

Basis of the report

International application No.

PCT/US00/18041

1. With	regard to th			· · · · · · · · · · · · · · · · · · ·
		ie elements of the interi	national application:*	
		ational application as		
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			ernished for the purposes of international search (u	nder Rule 23.1(b)).
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International application No.

PCT/US00/18041 V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement 1. statement Novelty (N) Claims 1-49 YES NO Claims NONE Inventive Step (IS) Claims 1-49 YES Claims NONE NO Industrial Applicability (IA) 1-49 Claims YES Claims NONE NO 2. citations and explanations (Rule 70.7) Claims 1-49 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a scanning probe microscope and/or method having means for measuring a portion, all of a sample volume or any other parameter associated with a target volume or making any change to the sample volume as recited in claims 1, 14 and 26; an illumination system having means for introducing the illumination along one or more edges of a sample as recited in claims 39 and 41; or a nanomachining system having mechanical, magnetic or electrostatic means for clamping a tip as recited in claim 44, means for stopping the vibration into a tip as recited in claims 45 and 46, or means for following the loci of a target nanomachining step to nanomachine a particular featuee in a target volume as recited in claims 47, 48 and 49. ----- NEW CITATIONS -----NONE



From the

INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: DAVID N. SLONE
TOWNSEND AND TOWNSEND AND CREW LLP
TWO EMBARCADERO CENTER,
8TH FLOOR
SAN FRANCISCO, CA 94111 3834

PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of (day/mo	Mailing
(day/mo	onth/year

17 APR 2001

Applicant's or	agent's t	file	reference
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15772-6-IPC 030921-000710PC

IMPORTANT NOTIFICATION

International application No.

International filing date (day/month/year)

Priority Date (day/month/year)

PCT/US00/18041

30 JUNE 2000

01 JULY 1999

Applicant

GENERAL NANOTECHNOLOGY, L.L.C.

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English transfer the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

1/1/09

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

KIET T. NGUYEN

Telephone No. (703) 308-4855

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 15772-6-1PC	FOR FURTHER ACTION	See Notification of Transmittal of Interna Preliminary Examination Report (Form PCT/IPEA	 tional (/416)
International application No. PCT/US00/18041	International filing date (day/) 30 JUNE 2000		
International Patent Classification (IPC) of IPC(7): H01J 37/26 and US Cl.: 250	or national classification and IF 0/306, 307; 73/105	PC 5	
Applicant GENERAL NANOTECHNOLOGY, L	L.C.		
2. This REPORT consists of a This report is also accomp been amended and are the	total of sheets. coanied by ANNEXES, i.e., sheets is basis for this report and/or slice for 607 of the Administrative	eets of the description, claims and/or drawings which	h have
3. This report contains indication	s relating to the following it	ems:	
I X Basis of the repor	_		
II Priority			
	t of report with regard to no	ovelty, inventive step or industrial applicability	
IV Lack of unity of it		reny, inventive step of industrial applicating	
V X Reasoned statement		ard to novelty, inventive step or industrial applicab	oility;
VI Certain documents c			
VII Certain defects in the	e international application		
VIII Certain observations	on the international application	on	
Date of submission of the demand	Date	of completion of this report	
10 JANUARY 2001		2 APRIL 2001	
Name and mailing address of the IPEA/U. Commissioner of Patents and Tradema Box PCT Washington, D.C. 20231	rks	Orized office Institute Respect	
Facsimile No. (703) 305-3230		hone No. (703) 308-4855	

Form PCT/IPEA/409 (cover sheet) (July 1998)★

Internal application No.
PCT/US00/18041

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X the sequence listing part of the description: pages NONE , as originally filed pages NONE , filed with the letter of With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which is: the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3). With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing: contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished. The amendments have resulted in the cancellation of: X the description, pages				NONE		filed with	the letter of		, filed with the demand	
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filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished. X The amendments have resulted in the cancellation of: X the description, pages NONE X the claims, Nos. NONE X the drawings, sheets/fig NONE This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70 Ideas of the supplements they do not contain amendments (Rules 70 Ideas of the supplements they do not contain amendments (Rules 70 Ideas of the supplements they do not contain amendments (Rules 70 Ideas of the supplements they do not contain amendments (Rules 70 Ideas of the supplements they do not contain amendments (Rules 70 Ideas of the supplements)	pre	limin	ary examina	ation was carried	out on the ba	asis of the sec	quence listing:	ernational af	pplication, the internation	aı
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X the drawings, sheets/fig NONE This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70).		X	the descri	ption, pages	NONE					
This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.1).		LX]	the claims	s, Nos	NONE					
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beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.1).	5.	This	report has b	een drawn as if (so	me of) the am	endments had	not been made, sin	nce they have	re been considered to go	
una 70.17).	111 111	beyc acemen is rep	ond the discl ont sheets whi oort as "ori	osure as filed, as in ich*have been furnis	dicated in the	Supplemental	Box (Rule 70.2(c))).** vitation under	r Article 14 and notes and an	70.10
*Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.			•	eet containing suc	h amendment	ts must be re	ferred to under in	tem 1 and a	annexed to this report	

	such stateme		
. statement			
Novelty (N)	Claims	1-49	YES
·	Claims	NONE	_ NO
Inventive Step (IS)	Claims	1-49	YES
	Claims	NONE -	NO
		∴	
Industrial Applicability (IA)	Claims	1-49	YES
11 7 7	Claims	NONE	_ NO
2. citations and explanations (Rule			
claim 44, means for stopping the vibration int	to a tip as recit particular featu	magnetic or electrostatic means for clamping a tip as recite ted in claims 45 and 46, or means for following the loci of see in a target volume as recited in claims 47, 48 and 49.	a

INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/18041

A CLASSIFICATION OF SUPPLIES			
A. CLASSIFICATION OF SUBJECT MATTER IPC(7): H01J 37/26			
US CL : 250/306, 307; 73/105			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S. : 250/306, 307; 73/105			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
NONE NONE			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) NONE			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
A	US 5,408,094 A (Kajimura) 18 Apridocument, especially fig. 6.	il 1995 (18/04/95), see entire	1-49
A	US 5,756,997 A (Kley) 26 May document, especially figs. 1 and 4-5.	1998 (26/05/98), see entire	1-49
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Furth	er documents are listed in the continuation of Box C	See patent family annex.	
\$ Could be seen a seen as a seen a			
"A" doc	ument defining the general state of the art which is not considered be of particular relevance	"T" later document published after the inter date and not in conflict with the applicat principle or theory underlying the inve	ion but cited to understand the
"E" earl	tier document published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be considered.	claimed invention cannot be
Cite	ument which may throw doubts on priority claim(s) or which is d to establish the publication date of another citation or other cial reason (as specified)	when the document is taken alone "Y" document of particular relevance; the	
-	ument referring to an oral disclosure, use, exhibition or other	considered to involve an inventive of combined with one or more other such being obvious to a person skilled in the	step when the document is documents, such combination
"P" doc	ument published prior to the international filing date but later than priority date claimed	"&" document member of the same patent f	
Date of the actual completion of the international search Da		Date of mailing of the international search	ch report
07 SEPTEMBER 2000		16 OCT 2000	
Commissioner of Patents and Trademarks		Authorized officer	
Box PCT Washington, D.C. 20231		KIET T. NGUYEN	
Englimita Na. (702) 205 2020		Telephone No. (703) 308-4855	7
Form PCT/ISA/210 (second sheet) (July 1998)*			